

I CLAIM:

1. A tire of elastomer comprising reinforcement elements, in which at least one reinforcement element is an elongate composite element of monofilament appearance, comprising substantially symmetrical technical fibers, said fibers being of great lengths, said fibers being impregnated in a thermoset resin having an initial modulus of extension of at least 2.3 GPa, in which said fibers are all parallel to each other, said elongate composite element having an elastic deformation in compression at least equal to 2%, and having in flexion a breaking stress in compression greater than the breaking stress in extension.
2. A tire according to Claim 1, in which said substantially symmetrical technical fibers are glass fibers.
3. A tire according to Claim 1, in which the thermoset resin has a glass transition temperature T_g greater than 130°C.
4. A tire according to Claim 1, in which the initial modulus of extension of the thermoset resin is at least 3 GPa.
5. A tire according to Claim 1, in which said elongate composite element has an elastic deformation in extension which is substantially equal to the elastic deformation in compression.
6. A tire according to Claim 1, in which said elongate composite element is covered with a layer of resorcinol-formaldehyde latex (RFL) adhesive.
7. A tire according to Claim 1, in which said elongate composite element reinforces that part of the tire which is located beneath the tread.

8. A tire according to Claim 1, in which said elongate composite element is arranged in parallel lengths extending from one shoulder to the other, the lengths being arranged in at least two plies which are superposed radially, the lengths being arranged at angles of contrary signs from one ply to the other.

9. A tire according to Claim 8, in which the absolute value of said angle is between 60° and 10° .

10. A tire according to Claim 2, in which the fiber content is between 30% and 80% of the overall weight of the elongate composite element, the density of the elongate composite element being less than 2.2.

11. A tire according to Claim 10, in which the fibers are glass fibers and the fiber content is between 50% and 80% of the overall weight of the elongate composite element.

12. A tire according to Claim 1, in which the initial modulus of extension is at least 30 GPa.

13. A tire according to Claim 1, in which the elongate composite element has a breaking stress in compression at least equal to 0.7 GPa.

14. A tire according to Claim 1, in which the elongate composite element has a circular section.

15. A tire according to Claim 14, in which the diameter of said circular section is greater than 0.4 mm.

16. A tire according to Claim 1, in which said elongate composite element has an elastic deformation in compression at least equal to 3%.



17. An elongate composite element of monofilament appearance, of a length which is very great relative to its section, comprising substantially symmetrical technical fibers, said fibers being of great lengths, said glass fibers being impregnated in a thermoset resin having an initial modulus of extension of at least 2.3 GPa, in which said fibers are all parallel to each other, the fiber content being between 60% and 80% of the overall weight, the density being less than 2.2, said elongate composite element having in flexion a breaking stress in compression greater than the breaking stress in extension, and having an elastic deformation in compression at least equal to 2%.

18. An elongate composite element according to Claim 17, in which said substantially symmetrical technical fibers are glass fibers.

19. An elongate composite element according to Claim 17, in which the thermoset resin has a glass transition temperature T_g greater than 130°C.

20. An elongate composite element according to Claim 17, in which the initial modulus of extension of the thermoset resin is at least 3 GPa.

21. An elongate composite element according to Claim 17, the density of which is between 1.4 and 2.05.

22. An elongate composite element according to Claim 17, having an elastic deformation in extension which is substantially equal to the elastic deformation in compression.

23. An elongate composite element according to Claim 17, in which the initial modulus of extension is at least 30 GPa.

24. An elongate composite element according to Claim 17, having a breaking stress in compression at least equal to 0.7 GPa.

25. An elongate composite element according to Claim 17, having a circular section.
26. An elongate composite element according to Claim 25, in which the diameter of said circular section is greater than 0.4 mm.
27. An elongate composite element according to Claim 17, having an elastic deformation in compression at least equal to 3%.
28. A tire of elastomer comprising reinforcement elements, in which at least one reinforcement element is an elongate composite element of monofilament appearance, comprising long glass fibers, said fibers being impregnated in a thermoset resin having an initial modulus of extension of at least 3 GPa, in which said fibers are all parallel to each other, said elongate composite element having an elastic deformation in compression at least equal to 2%, and having in flexion a breaking stress in compression greater than the breaking stress in extension.
29. A tire according to Claim 28, in which said elongate composite element has an elastic deformation in extension which is substantially equal to the elastic deformation in compression.
30. A tire according to Claim 28, in which said elongate composite element is covered with a layer of resorcinol-formaldehyde latex (RFL) adhesive.
31. A tire according to Claim 28, in which said elongate composite element reinforces that part of the tire which is located beneath the tread.
32. A tire according to Claim 28, in which said elongate composite element is arranged in parallel lengths extending from one shoulder to the other, the lengths being arranged

in at least two plies which are superposed radially, the lengths being arranged at angles of contrary signs from one ply to the other.

33. A tire according to Claim 32, in which the absolute value of said angle is between 60° and 10° .

34. A tire according to Claim 28, in which the fiber content is between 50% and 80% of the overall weight of the elongate composite element, the density of the elongate composite element being less than 2.2.

35. A tire according to Claim 28, in which the initial modulus of extension is at least 30 GPa.

36. A tire according to Claim 28, in which the elongate composite element has a breaking stress in compression at least equal to 0.7 GPa.

37. A tire according to Claim 28, in which the elongate composite element has a circular section.

38. A tire according to Claim 28, in which the diameter of said circular section is greater than 0.4 mm.

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